

## NOTES ON INDIAN WAGTAILS.

BY

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Having for a number of years paid special attention to some of the Indian Wagtails I thought it might be of some help to others to place on record the result of my researches. That the subject is a complex one may be gathered from the writings of earlier authors and I may say at once that I have seldom tackled so difficult a subject. One may be able to determine correctly most of one's cabinet specimens but to put on paper any reliable guide which enable others to do so is a matter of extreme difficulty. When one finds that, with say the Yellow-headed Wagtails, one has the two sexes differing in plumage in winter and summer, and the birds taking two years to become fully adult one may begin to realise the complexity of the task which confronts one. Thus there may be eight or ten specimens of the same species before one and not one alike! and all more or less similar to eight or ten more of a closely allied form, not to mention the possibility of *individual* variations.

To try and differentiate these in their various plumages and to tell others how to do so has been my aim and it is mainly the very carefully collected series obtained by myself and Mr. Whistler which had enabled me, I hope, to evolve a certain amount of order out of chaos.

## I,—THE YELLOW-HEADED WAGTAILS.

*Motacilla c. citreola* and *Motacilla c. calcarata*.

In the *Fauna of British India* vol. ii p. 299, it is stated that *M. citreola* (= *calcarata*) can be differentiated from other Wagtails by the longer tarsus. I do not think these two Wagtails can be confused with any other at any season or age, the broad yellow supercilium and more or less yellow on the forehead being sufficient distinction. Moreover the statement about the length of the tarsus is not correct except for *calcarata* which certainly has a longer tarsus, for I find that out of 9 adult males of *melanogriseus* (feldcggi *F.B.I.*) and out of 10 *beema*, 8 of each are within the limits of measurement of the tarsus of *citreola*, viz., 23-25.5 mm.

*Summer Plumage, males.*

The males can always be differentiated. In the *calcarata* the back is black and the edges of the wing coverts tinged with yellow, in *citreola* the back is grey with a black neck collar and the edges of the coverts white. One may find birds of both species in breeding dress which are not quite the same as adults and these are most certainly birds of the previous year. In such specimens of *calcarata* the black of the back is mixed with dark grey and in *citreola* there is only a trace of the black collar and the yellow of the head is much sullied on the crown with dark feathers but in no state of plumage has *citreola* any black feathers on the back.

*Calcarata: Winter Plumage, males:*

*Calcarata* is darker on the back than *citreola* and lacks the black collar which perfectly adult *citreola* generally shows, while the back frequently has blackish feathers intermixed which *citreola* lacks. Occasionally the blackish feathers on *calcarata* are near the nape of the neck and so do form an indistinct collar but if so there are generally some black feathers elsewhere on the mantle. The amount of black in the upper-parts in this species varies a good deal and those with most ore adults and those with little or none, and whose backs are grey brown and

whose under-parts are less yellow, are birds of the year. These latter are rather like some first winter *citreola* but size will always differentiate. Another small difference between *citreola* and *calcarata* is that in the latter the under tail coverts are more strongly tinged with yellow, these parts being nearly white in *citreola*.

*Citreola* : Adult Winter, males.

These differ but little from adults in summer plumage ; the head is usually less pure yellow, more sullied with dark feathers on the crown, and the black collar rather less well marked ; one finds many birds which are certainly not birds of the year and which differ considerably however from perfect adults. These are probably birds a year old. They differ from the adults in having the yellow on the head confined to the forehead and a broad supercilium running from the base of the bill to beyond the ear-coverts, the rest of the head being brown or olive brown tinged with yellow. There is no black neck band or collar and the ear coverts are sullied yellow instead of pure ; the upper-parts are more tinged with brown but the under-parts are yellow as in the adult. These birds probably become perfect adults at the next spring moult.

*First winter plumage, both sexes, and adult females.*

These are distinguishable at once from adults and one year old birds in having the under-parts *whitish* except that the chin and throat are *always* and the middle of the belly *sometimes* tinged pale yellow. On the upper parts they are browner, less grey and the only yellow on the head is confined to the supercilium which runs forward to the base of the bill on each side and is never absent. The cheeks and ear-coverts vary a good deal but are more or less dusky, *always* tinged with yellow ; in some there is a pectoral band of black spots. The yellow supercilium and tinge of yellow in the ear-coverts together with the lack of greenish tint on the upper-parts at once distinguish it from any Blue-headed Wagtail. So far as I can judge, in this plumage males and females are not distinguishable, and vary so much *inter se* that I cannot see any reliable guide to distinguish them from adult females.

*Calcarata* ; Females in summer plumage.

In this plumage two forms are found ; one, the adult, has bright canary yellow under-parts, supercilia and a tinge on the forehead (much as in winter) and the other, which is the first summer plumage is distinguishable from it at a glance by these yellow parts being very pale or whitish tinged with yellow (rather as in first winter). This was indicated by Whitehead (Ibis 1909 p. 242) and can be clearly seen in his specimens in the British Museum. From *citreola* adult it is distinguished by the greater size, blacker upper tail coverts and, whereas adult *calcarata* is as rich a yellow as adult *citreola*, the first summer *calcarata* is less yellow than any *citreola*.

*Citreola* : Females in summer plumage.

In the "*Fauna of British India*" it is said that the males and females are similar ; this is not so. The adult female has neither the pure grey back nor the black collar of the male ; the upper-parts are greyish brown, the forehead, supercilia and a good deal of the ear-coverts are yellow, the under-parts are as yellow as in the male. As in *calcarata* so in this bird, the adult plumage is not acquired in the first spring and the first summer birds are distinguished from the adults by the less bright yellow coloration of the plumage, a yellowish olive brown crown, darker, less yellow, ear-coverts.

*Calcarata* : Females in winter.

The adult female differs from any male in winter in lacking the yellow forehead, (the yellow on this part being confined to the base of the bill where the two supercilia coalesce) so that the whole head is dark olive with a yellow tinge instead of a yellow forehead and dark olive crown ; the lores, cheeks, ear-coverts are olive tinged with yellow instead of yellow ; there are no blackish

feathers on the upper-parts, the under-parts are as yellow as in the male, but the intensity varies in both sexes.

The adult female differs from adult female *citreola* in having much brighter yellow under-parts (merely tinged with yellow in *citreola*) a brighter yellow supercilium, and rather darker upper-parts and ear-coverts.

The female of the year differs from the adult female in lacking almost all yellow on the under parts, these being nearly white, the supercilium and feathers at the base of the bill are sullied white instead of yellow; head and upper-parts dark slate grey instead of olivaceous brown. The lack of any yellow at once distinguishes it from any male. In this dress it is very like the young of the year of *melanogriseus*, in fact except for the larger supercilia which meet over the base of the bill I can see no difference except for the size of the tarsi, toes and claws. The white supercilia and usually the lack of any yellow on under-parts help to distinguish it from first year *citreola* of either sex. Females differ in size from males only in the length of the wing and tail which average smaller: wings 77-81 tails, 75-78 m.m.

*Juvenile or nestling plumage.*

Upper-parts rich brown; buffish supercilia surmounted by a broad, nearly black line, underparts strongly tinged with buffish brown, whitish on vent and throat, with a black moustachial line running down each side to the black spotted pectoral band; *calcarata* and *citreola* are probably indistinguishable in this dress except that (in those examined) the white edges to the wing coverts are broader in *calcarata*.

The spring moult of *citreola* and *calcarata* is the same as that given for *melanogriseus*; it starts towards the end of February and males are in full plumage about the middle of March, females somewhat later.

I have already stated that the tarsus in *calcarata* is longer than in the other Wagtails and I find that the middle toe and claw as well as the hind claw are also longer; in fact *calcarata* is altogether a larger bird with a slightly longer bill, tail and wing. Compared with *citreola* the bill is nearly always 1 to 2 mm. longer (and this difference is more apparent to the eye than measurements indicate) and though the measurements of wings and tail overlap *calcarata* averages larger in both measurements. Compared with *beema* and *melanogriseus*, *calcarata* is absolutely longer in all measurements (bill, tarsus, tail, and wing; extremes may just meet).

	<i>M. calcarata.</i>	<i>M. citreola.</i>	<i>M. melanogriseus.</i>	<i>M. beema.</i>	<i>M. calcarata.</i>
Wing .. ..	12 ♂♂ 83·5-88 once 81	12 ♂♂ 81-86	19 ♂♂ 79·5-84·5 once 85·5	12 ♂♂ 78-83	from orig. descr. <i>Asiatic Researches.</i> — <i>xix.</i>
Tarsus .. ..	27-28·25 once 26	23-25·5 once 26·5	22·5-24 once 25	22·5-24·5	1.19 inch.= 30mm.
Mid toe & claw ..	22-24 once 21·5	20-22	as in <i>citreola</i>	as in <i>citreola</i>	·62 mid toe= 16mm. claw say 7mm.—23
Total .. ..	48·75-51·5 once 53	43-47	as in <i>citreola</i>	as in <i>citreola</i>	(53)

	<i>M. calcarata</i>	<i>M. citreola</i> .	<i>M. melano-griseus</i> .	<i>M. beema</i> .	<i>M. calcarata</i> .
Bill exposed ..	13-14·5	11·25-12·5	as in <i>citreola</i>	as in <i>citreola</i>	62=16mm.
Tail .. ..	74-81·5 once 84	72-77	67-76	70·5-73·5	
Hind claw ..	12·15·5 once 11	10-12 once 13	as in <i>citreola</i>	as in <i>citreola</i>	44=11mm.

The name *calcarata* of Hodgson for one of the Yellow-headed Wagtails has been dropped as it was considered that, as Hodgson described a winter bird, it could not be said which of the two Wagtails he had before him and therefore Gould's later name *citreoloides*\* was substituted and used in the Fauna and other works. But a careful examination of Hodgson's original description reveals that his *calcarata* must have been *citreoloides* and not *citreola*; not only does of course the name itself suggest that he had before him a bird with an outstandingly long hind claw but his measurements at once reveal that they could not apply to *citreola*. His bird with a tarsus of 1·19 (=30mm.) could only be *citreoloides*. One does not know how he measured the bill so this measurement is of little account. His measurement of the hind claw is short and I find that this measurement varies according to the time of the year. In autumn and early winter the hind claw is longer as a rule than in spring and summer in all Wagtails, this is due to wear or breaking off of the very slender tip and in such examples of *citreoloides* the hind claw often measures about 12mm. whereas autumn birds have the hind claw about 15mm.

The measurement of the tarsus and middle toe with claw is not a very easy one to take and no doubt different people would get different results on the same specimens according to where they considered the tarso-phalangeal joint to be (not always easy to see in a dry skin), but with care this measurement can be done with accuracy. Measurement from the tuberosity of the tarsus on its outer side to the tarso-phalangeal joint will give the longest possible tarsal measurement, from this last (marked) point measure to the tip of the middle claw with the toe well extended. Though these two measurements may differ according to different observers, the sum of the two measurements should correspond, and it will be seen from the table given that in *citreola* the sum of the two varies from 43-47 and in *citreoloides* from 48·75-53mm. This distinction holds for both sexes.

## II.—YELLOW WAGTAILS.

If the Yellow-headed Wagtails can be differentiated with fair certainty the same cannot always be said for the rest of the Yellow Wagtails except for the adult males; with females and more particularly with first winter birds the difficulty in many cases is to find specimens which from the locality in which they were obtained can only belong to one form, (for instance Yellow Wagtails obtained in Northern Scandinavia could only belong to the race *thunbergi* as no other form occurs there,) and some of these basic guides (if I may so call them) do not seem to be represented in any collection.

\* *Citreoloides* of Hodgson was a *nomen nudum*.

(i) *Motacilla feldegg melanogriseus* (=feldegg F.B.I.)

*Feldegg* is the western form of the Black-headed Wagtail, *melanogriseus* is the eastern. Dr. Hartert (Vog. Pal. F. 296) says this race breeds in Turkestan and winters in India and may be distinguished at first glance from *feldegg* by the white chin and moustachial streak, shorter wing and some slight differences in the colour tone of the upper and under parts. I have examined 15 adult males in spring and find the following results :

White chin present in 6, absent in 3, a trace in 6.

Moustachial streak in 3, absent in 4, a trace in 8.

Both characters are fully present in only 3 of these, entirely absent in 2, the rest have one character and a trace of the other. Now out of 24 Egyptian adult males 3 exhibit these characters of *melanogriseus* and 3 more partly so, so either both races occur in India and in Egypt, or these characters are variable; I incline to the latter view.

15 adult males *melanogriseus* measure wings (78,) 79·5-84·5 (85·5) mm.

24 adult males *feldegg* measure wings (82,) 83-87 mm.

so that *melanogriseus* is on the average a smaller bird; its wings measure mostly 80-83 whereas *feldegg* measure mostly 83-86; also I think that usually the tail is also shorter (mostly 68-72 mm.). Taking all these points I think that a sufficient percentage of specimens could be picked out to warrant recognition of the two races.

*Summer plumage.*

The jet black head of the male suffices to distinguish it from any other Indian Wagtail; the female has the upper-parts brownish grey lightly tinted with olive green, the head darker usually with some black feathers in it or, and these are probably older birds, the whole crown blackish, the ear-coverts and lores like the head; a few light feathers behind the eye is the only trace of a supercilium; under-parts white tinge with yellow, most pronounced on the belly and under-tail coverts and often dark spots occur in the pectoral region.

From female of *thunbergi*, the black on the head, the less richly yellow under-parts and usually less developed supercilia help to distinguish it, though some birds (? first summer) of each may be difficult. From female of *beema* easily distinguishable even in the field by darker ear-coverts and absence of a clear white supercilium, besides being less olive green on the upper-parts.

*Winter plumage.*

In the *adult male* the olive green back is not so bright as in summer, the under-parts a less pure bright yellow; often some dark spots on the pectoral region. Whole head is now dark slate, tinged with olive in fresh feather, with always a certain but variable amount of black feathers admixed, especially at base of bill, forehead, lores, and round eye; no supercilium. Ear-coverts dark slate or brown, with odd light feathers. Easily distinguishable from all other Wagtails except adult *thunbergi* (= *borealis*) in the field; in the hand the black feathers on the head distinguish it from the latter.

The *adult female* resembles the spring bird; it is rather less bright in general coloration and has no black on the head, this part being greyer; it is very similar to female *thunbergi* but is usually less richly yellow underneath and the supercilia are not so well developed; the same differences between this bird and female *beema* in spring also apply in winter plumage.

Females are smaller than males: wing 75-77·5, once 79; tail 64-72 mm.

In the *first winter* (i.e. birds of the year) both sexes lack all yellow and green tones in the plumage; this at once distinguishes them from any *citreola* and *beema*. The upper-parts including the head and ear-coverts are brownish grey or dark slaty grey, somewhat variable, darkest on the rump and the upper-tail coverts, which in males are blackish (and this is the only difference between the sexes that I can see); a well marked whitish or buffish white supercilium from base of bill to well behind the eye, but not coalescing with that of the

opposite side over the base of the bill as in young female *calcarata*; under-parts sullied white, often a buffish wash and a few dark spots on the pectoral region. I have already drawn attention to the similarity in this dress to that of female *calcarata* in the first winter plumage.

The above description is taken from specimens which were collected in an area where *thunbergi* does not occur and checked by specimens moulting into summer plumage and so is undoubtedly correct (*cf.* F.B.I. ii. p. 297).

*Spring Moult.* Involves the whole of the body feathers, the inner three secondaries (=tertiaries) all, or all except the outer two or three, of the greater coverts, all the median, all or part of the lesser coverts; the central tail always, often the whole tail, but odd feathers may not be renewed. Moults in February; by early in March males are in full plumage; females about a fortnight later.

(ii) *Motacilla flava beema*: *Summer plumage.*

The *males* cannot be confounded with any other Indian Wagtail. The pale french-grey head, large white supercilia; white chin and moustachial streak and pale grey ear-coverts mixed with white suffice to distinguish it in the hand as well as in the field. The *females* are also distinctive; whole of the upper-parts brown with a strong olive green wash except on the head; supercilia pronounced and white; ear-coverts like head but mixed with white; chin and throat yellowish white with a buff tinge; rest of under-parts pale yellow, much less rich than in the male. Distinguished from female *thunbergi* by the paler ear-coverts and lores and by the clear white supercilia.

*Winter plumage.*

The *adult males* are a dull edition of the spring birds; the under-parts less rich yellow, dark spots in the pectoral region may be present, and the grey on the head is partially masked by an olive-green wash to the tips of the feathers. From *melanogriseus* and *thunbergi* by the clear white supercilia and paler grey crown, etc. The *adult females* resemble very much the spring females and are distinguished by the same characters from the other female Wagtails.

In *first winter plumage* the sexes are not with certainty distinguishable. They are much like the adult female but usually less yellow on the under-parts. From young *melanogriseus* by the yellower belly and under-tail coverts and a certain, though variable, amount of olivaceous green on the upper-parts.

*Spring moult* as in *melanogriseus*.

(iii) *Motacilla flava thunbergi* (= *borealis* F.B.I.) *Summer plumage.*

The *male* is easily distinguishable by the dark slate grey head, absence of any supercilium (an old white feather or two behind the eye is occasionally present) and dark ear-coverts. The upper-parts vary somewhat; some specimens are dull olive green, others bright olive green, these latter also being brighter yellow underneath. This may be a question of age, and I think it is very likely, or it may be an individual variation. I am satisfied that it is not a geographical variation as both forms breed in the same district (Yenesay River).

The *female* exhibits two types differing from each other in the intensity of the yellow of the under parts. This is probably due to age (as with the Yellow-headed Wagtails), those which are brighter yellow being adults and those which are duller being birds of the first summer. The head and upper-parts are dark olive brown, greenish olive on the rump, dark ear-coverts and lores, a weakly-marked whitish supercilium is present; the pectoral region with or without spots.

*Winter plumage.*

The *adult male* resembles the spring male but the slaty-blue head is more or less marked by olive edges to tips of the feathers, the under-parts are less bright yellow and the mantle is more olive-brown, not so olive-green.

The *adult female* resembles in all essentials what I have characterised as the *adult summer female*; the pectoral region may or may not have blackish spots.

The *first winter plumage*. I can give no distinguishing characters in this plumage as I have seen no specimens which for a certainty belong to this race.

(iv) *Motacilla flava simillima* (= *flava* F.B.I.)

The *adult male* in spring closely resembles that of *thunbergi* except that there is a well marked white supercilium behind the eye and more constantly has blackish spots on the pectoral region. It is doubtful whether the females and first year birds can be differentiated from *thunbergi*. The darker crown and ear-coverts distinguish it from the true *flava* of Europe with which it was confounded in the Fauna. A winter visitor to the eastern parts of the Empire.

(v) *Motacilla flava leucocephala*.

Spring males are distinguishable from any other Wagtail by the almost pure white crown and ear-coverts,—even in the field. Females and winter birds I have not seen.

### III.—THE BLACK AND WHITE WAGTAILS.

(i) *Motacilla alba dukhunensis*.

This is the common White Wagtail of a large part of the Indian Plains in winter and is rather a poorly differentiated form of the European White Wagtail (*M. a. alba*.) The spring birds and adult males in winter are a shade paler grey on the upper parts, usually the white edges to the coverts are wider so that the two wing bars coalesce to form a broad band as in *personata*, and the wings are a trifle longer on the average than in the typical *alba*. The first winter birds and adult females in winter cannot with certainty be differentiated; some are a shade paler on the upper parts and some are not; the wing bars do not coalesce but some have rather wider white edges to coverts than is found in *alba*; on the other hand many others are indistinguishable in this respect; they average longer in the wing and, so far as I have seen, never shew the yellowish tinge on the white of the face which is often, but not always, found in *alba* in similar dress; moreover they have often more distinctly white foreheads. There is no single character however which will invariably separate them. It is possible of course that these birds which cannot be differentiated are the typical *alba*; on the other hand I have not seen any adult male which could certainly be referred to the latter race.

*Summer Plumage.*

*Males and females* when fully adult are not with certainty distinguishable; some females however have the white forehead less pure, ticked with black or grey, and less white in the wing coverts, these very likely are first summer birds. Sometimes females have a certain amount of white on the chin and throat but this is an individual variation.

*Winter Plumage.*

The *adult male* resembles the summer male, except of course for the white, not black, chin and throat, and the black crown is sullied posteriorly with dark grey; the *adult female* has the crown grey, sometimes with a few black feathers and the forehead white, but less broad and less pure than the male.

The males in first winter have the crown dark, a mixture of black and dark grey, very variable, and the forehead white, some are entirely grey on the crown and the forehead greyish, these latter resemble the first year female and are not to be differentiated; in both sexes the wing bar is double.

*Measurements.*

<i>M. alba. alba.</i>	Norway, Sweden and W. Europe	(20 ♂♂)	wing 88-92·5	mm.
		(11 ♀♀)	„ 84-88·5	„
<i>M. alba dukhunensis.</i>	Sind and Punjab	(21 ♂♂)	„ 91-96	„
		(7 ♀♀)	„ 84-91	„
<i>M. alba dukhunensis</i>	Yenesay (breeding)	(17 ♂♂)	„ 91-96	„

*Dukhunensis* is distinguished at all seasons and in both sexes from *personata* by the white, not the black, ear-coverts; in winter also by the white throat, and always by the shorter tail.

*dukhunensis* tail (82,84) 88-95 mm.

*personata* tail (87,90) 93-102 mm.

*Spring moult* involves body, always the central tail and fairly often other tail feathers; inner greater coverts, usually the three tertials, all the median and some of the lesser coverts.

*(ii) Motacilla alba personata.*

*Summer plumage.* Both sexes have white foreheads and black crowns and ear-coverts, also chin and throat. The black on the head in the female rather less wide than in the male, that is to say it extends not so far down on the nape, otherwise the sexes are similar. Males differ from males of *hodgsoni* in having grey, not black, lesser wing coverts and mantles; some females almost indistinguishable from females of *hodgsoni* but in the latter the mantle and lesser coverts are usually grey mixed with black or almost quite black, in both sexes however *hodgsoni* has usually a longer bill and shorter tail (89-95mm.) Broad white wing band much as in *hodgsoni*.

*Winter plumage.* The mantle resembles the summer bird but the chin is white and the bases of the throat feathers are white so that a certain amount of white shews in this part. The female is much the same, usually the black on the head is less wide. In both the ear-coverts are black.

Males in first winter resemble adult males, sometimes, but not always, the crown is less black, *i.e.*, mixed with grey; the broad white wing band is not so pure white. The female has black ear-coverts as in the males, the head is grey, forehead white bordered posteriorly with blackish feathers; wing band as in male. Chin and throat in first year birds much as in adult; the amount of black or white on the throat varies individually.

*Measurements.*

6 ♂♂ wing 94·5-98 tail mostly 98-102 bill from base 16·5-17·5 mm.

7 ♀♀ wing 87·5-95 tail mostly 90-100 bill from base 15·5-17 m.m.

*(iii) Motacilla alba hodgsoni.*

This is perhaps the most handsome of the Black and White Wagtails; in summer plumage the male has the crown and all the upper-parts pure black, forehead white, ear-coverts, chin and throat black as in *personata*. Lesser coverts black and broad pure white wing band. The female varies somewhat, some, perhaps older birds, are as black on the upper-parts as the male, others are darker grey than *personata* mixed or not with black feathers; these are perhaps birds of the previous year.

In winter the black ear-coverts are retained and the bird is very like *personata*; however the darker grey of the mantle with or without black feathers admixed, the shorter tail and rather longer bill will differentiate it.

*(iv) Motacilla alba ocularis.*

Differentiated from all the other Wagtails at all seasons by a black line from the base of the bill through and carried on beyond the eyes. It has a grey mantle and white ear-coverts.

*(v) Motacilla alba leucopsis.*

A black-backed form like *hodgsoni* but has white ear-coverts, which at all seasons will differentiate it from the latter.



(vi) *Motacilla maderaspatensis*.

Mr. Stuart Baker puts this Wagtail (B.N.H.S. 27 p. 37) as a race of *alba*; with this I cannot agree. It is possibly true that it does not breed in the area of *hodgsoni*, there being probably an altitudinal difference in habitat, though it undoubtedly does breed in the Himalayas; yet in many points this species differs from the *alba* group. Firstly this bird is in habits unlike the latter group in being practically confined to water courses. Secondly, it is resident throughout most of its range whereas all the *alba* group are migratory. Thirdly, its very superior size; fourthly, its total absence of white forehead which all races of *alba* shew in winter, fifthly the summer and winter plumages are alike and sixthly, so far as I have been able to ascertain, it has no spring moult.

#### IV.—THE GREY WAGTAIL.

*Motacilla cinerea melanope*.

This is the Eastern representative of the European Grey Wagtail. It differs from the latter in having a shorter tail and some alleged differences in the outer three tail feathers, viz:—(1) outer tail feather brown on the middle of the shaft, (2) the next, some brown on the inner web and (3) the third, black on the inner web's edge. I have examined 30 specimens as regards these characters and I find the following results:

Character	(1)	Present in	23	out of	28
	(2)	„ „	5	„	28
	(3)	„ „	15	„	24

In only 4 out of 27 do the alleged characters hold good in all three feathers, in only one do they fail in all three. On the other hand in *M. cinerea cinerea* I find—

Character	(1)	Present in	1	out of	9
	(2)	„ „	1	„	9
	(3)	„ „	7	„	9

Hence it is obvious that characters (2) and (3) are useless and character (1) is of some slight help together with the length of tail in distinguishing these races.

30 specimens of *melanope* measure:—Tail 88–95, and 9 of *cinerea* 98–110 mm.

Besides a wide breeding distribution in Asia, this bird breeds in the Safed Koh, (just over the N. W. Frontier) and in the Himalayas.